

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
AT&T Petition to Launch a Proceeding)	
Concerning the TDM-to-IP Transition)	
)	GN Docket No. 12-353
In the Matter of)	
)	
Petition of the National Telecommunications)	
Cooperative Association for a Rulemaking)	
to Promote and Sustain the Ongoing)	
TDM-to-IP Evolution)	

COMMENTS OF
THE NEBRASKA RURAL INDEPENDENT COMPANIES

Dated: January 28, 2013

The Nebraska Rural Independent Companies

Paul M. Schudel (NE Bar No. 13723)
James A. Overcash (NE Bar No. 18627)
Woods & Aitken LLP
301 South 13th Street, Suite 500
Lincoln, NE 68508
(402) 437-8500

Thomas J. Moorman
Woods & Aitken LLP
2154 Wisconsin Ave. NW, Suite 200
Washington, D.C. 20007
(202) 944-9502

Their Attorneys

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	THE <i>NTCA PETITION</i> PROVIDES A MORE BALANCED, FACT-BASED APPROACH TO ADDRESS THE EVOLUTION FROM TDM-TO-IP WITHIN THE PSTN AND IS MORE LIKELY TO PRODUCE PUBLIC POLICY THAT IS LEGALLY SUSTAINABLE AND RATIONAL.....	5
A.	NTCA’s Suggested Confirmation of Existing Interconnection Requirements and Near-Term Economic Incentives should be Adopted.....	5
1.	NTCA’s suggestion that the FCC should confirm existing interconnection requirements as amplified herein is necessary for the continued evolution of the PSTN including those networks that are IP-based.....	6
2.	NTCA’s near-term economic incentives are rational and should be adopted.....	8
B.	The Decisional Framework Articulated in the <i>NTCA Petition</i> will Provide Stability and Predictability for All Affected Carriers.....	9
1.	The <i>NTCA Petition’s</i> framework will result in fact-based decisions to support rational public policy that will benefit all affected entities.....	12
2.	The public interest would be served through adoption of NTCA’s decisional framework.....	14
III.	<i>AT&T’S PETITION</i> SHOULD BE REJECTED BECAUSE IT LACKS A FACTUAL, LEGAL AND RATIONAL PUBLIC POLICY BASIS.....	15
A.	The <i>AT&T Petition</i> is Based on Two Questionable Premises Regarding the Transition from TDM-to-IP Transmission.....	16
1.	AT&T incorrectly suggests that the transition from TDM-to-IP creates two distinct networks.....	16
2.	AT&T incorrectly suggests that the transition from TDM-to-IP fundamentally changes the legal status of the PSTN, with no common carrier or universal service obligations.....	24
a	Network layers.....	25

b.	Statutory issues	27
B.	The <i>AT&T Petition</i> has Extremely Broad Scope, is Inconsistent with the Act, and is Likely to Create Chaos in Connection with the Provision of Telecommunications Services to Rural America	31
1.	Local and long-distance calling	34
2.	Compulsory service requirements	35
3.	Interconnection requirements	37
4.	Other regulations	40
5.	Preemption.....	41
6.	Effects on rural areas	45
IV.	CONCLUSION	48

SUMMARY OF COMMENTS

The Nebraska Rural Independent Companies (“NRIC”) urge the FCC to create incentives for carriers to continue and accelerate investments in Internet Protocol-enabled (“IP-enabled”) technology within the Public Switched Telephone Network (“PSTN”) based upon a balanced regulatory approach. Above all, and as part of this effort, the Federal Communications Commission (“FCC” or the “Commission”) should confirm that the Section 251/252 interconnection framework governs during the migration of additional IP-enabled technology within networks as the Section 251/252 interconnection framework makes no distinction between technologies that may be used in the PSTN. In doing so, NRIC also requests that the following, four (4) corollary interconnection confirmations also be provided by the Commission in an effort to avoid uncertainty and to ensure that the interconnection of carrier networks is not undermined:

1. Entities meeting the definition of “common carriers” are telecommunications carriers regardless of transport protocol used;
2. Entities that are telecommunications carriers have the right to seek IP-to-IP interconnection from an ILEC under Section 251 of the Act;
3. Entities that seek interconnection under Section 251 of the Act are eligible to have any unresolved issues determined under the procedures and standards found in Section 252 of the Act; and
4. Entities are prohibited from imposing interconnection requirements upon an ILEC that are superior to those (i.e., are “more” than equal to those) provided by the ILEC to its end users or to its affiliates.

NRIC agrees that the efforts by the Commission should ensure that all consumers nationwide continue to have access to quality communications services and to use the fact-based framework that National Telecommunications Cooperative Association (“NTCA”) proposes to

evaluate existing regulatory rules and obligations. NTCA provides a reasoned and rational process that calls for identification of federal regulations, based on the facts, that may inhibit the on-going migration from TDM-based networks to IP-enabled networks, and then to determine whether the public interest is served by retaining, modifying or eliminating those regulations. Based on these Commission findings, state commissions will be equipped to determine state regulatory actions that may be necessary based on their regulatory jurisdiction and state-established regulatory policies and requirements.

NRIC demonstrates in these comments that AT&T has failed to justify its proposed framework for the continued migration of IP-enabled technology within carriers' networks. The AT&T framework undermines important protections in the Act's regulatory structures including interconnection requirements and requirements to mitigate the negative effects of market power that large market-dominant carriers possess. Moreover, NRIC opposes the apparent scope of state preemption that AT&T seeks as such preemption is sought without factual, legal and rational public policy bases. NRIC also demonstrates that the *AT&T Petition* is based on two questionable premises – the assumption that deployment of two side-by-side networks is required, and the assumption that use of IP-enabled technology transforms the service and carrier networks into something other than a telecommunications network providing telecommunications services.

Therefore, NRIC respectfully requests in these Comments that the Commission reject AT&T's proposed framework and act consistent with the more modest and rational direction that would be established by application of the framework presented in the *NTCA Petition*. NTCA is correct in its statement that this on-going migration/evolution to IP-based networks must "hearken back ultimately to the core objectives of protecting consumers, promoting competition,

and ensuring universal service.” *NTCA Petition* at 15. NRIC agrees that this must and should be the foundation for action taken by the Commission and is a test that the AT&T framework does not meet.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
AT&T Petition to Launch a Proceeding)	
Concerning the TDM-to-IP Transition)	
)	GN Docket No. 12-353
In the Matter of)	
)	
Petition of the National Telecommunications)	
Cooperative Association for a Rulemaking)	
to Promote and Sustain the Ongoing)	
TDM-to-IP Evolution)	

COMMENTS OF
THE NEBRASKA RURAL INDEPENDENT COMPANIES

I. INTRODUCTION.

The Nebraska Rural Independent Companies ("NRIC")¹ appreciate the opportunity to submit these Comments to the Federal Communications Commission ("Commission" or "FCC") in response to the Public Notice, dated December 14, 2012,² seeking comments on submission

¹ The Companies submitting these Comments are: Arlington Telephone Company, The Blair Telephone Company, Cambridge Telephone Company, Clarks Telecommunications Co., Consolidated Telephone Company, Consolidated Telco, Inc., Consolidated Telecom, Inc., The Curtis Telephone Company, Eastern Nebraska Telephone Company, Great Plains Communications, Inc., Hamilton Telephone Company, Hartington Telecommunications Co., Inc., Hershey Cooperative Telephone Co., K. & M. Telephone Company, Inc., The Nebraska Central Telephone Company, Northeast Nebraska Telephone Company, Rock County Telephone Company, Stanton Telecom Inc., and Three River Telco.

² See Public Notice, Pleading Cycle Established on AT&T and NTCA Petitions, GN Docket No. 12-353, DA 12-1999, released December 14, 2012.

by AT&T, Inc. (“AT&T”) of its “Petition to Launch a Proceeding Concerning the TDM-to-IP Transition” filed on November 7, 2012 (the “*AT&T Petition*”) and a petition filed on November 19, 2013 by the National Telecommunications Cooperative Association (“NTCA”) entitled “Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution” (the “*NTCA Petition*”). The *AT&T Petition* and the *NTCA Petition* are collectively referred to herein as the “*Petitions*”.

NRIC member companies have invested in and provide telecommunications and broadband access services to some of the most rural, sparsely-populated areas of the United States. NRIC believes the experience and commitment of its member companies, each serving rural Nebraska, enables them to address the real-world impacts that the *Petitions*’ respective frameworks would have on rural customers and the operations of rural carriers’ networks.

NRIC is supportive of the Commission’s issuance of the *Petitions* in a companion comment and reply comment cycle, as it is efficient for small entities such as NRIC that have limited financial resources to participate in multiple dockets. As explained herein, the *Petitions* could not be more diametrically opposed regarding the framework for the relief each seeks, despite the fact that both AT&T and NTCA assert that their structures are required to address the continued evolution of the Public Switched Telephone Network (“PSTN”) from Time Division Multiplexed (“TDM”) switching and transport network components to an Internet Protocol

("IP") transmission and switching infrastructure.³ Accordingly, FCC action is required to address the differing approaches that the *Petitions* take.

NRIC notes that the resolution of the issues raised in this proceeding, coupled with the similar issues raised in the "Further Notice of Proposed Rulemaking" section of the *FCC Transformation Order*⁴ (the "*FCC Transformation FNPRM*") will determine whether and how availability of broadband services is expanded to rural consumers such as those served by the NRIC members. Moreover, these same proceedings will help determine whether carriers that currently provide voice and broadband services to rural consumers will be financially able to continue to do so into the future.

Based on its review of the *Petitions*, NRIC respectfully submits that the FCC should reject the framework of the *AT&T Petition* and, thereafter, provide guidance to help ensure that the natural evolution of the PSTN to an IP-based set of network components and infrastructure would not be undermined by the exercise of market power by the largest telecommunications carriers in the nation. At the same time, and for the reasons stated below, the *NTCA Petition* represents a far more balanced and appropriate framework for addressing the evolution of the

³Time-division multiplexing ("TDM") is a type of multiplexing in which two or more voice signals are transmitted over a single circuit by taking turns in individual time slots created on that circuit. See: http://en.wikipedia.org/wiki/Time-division_multiplexing. Internet Protocol ("IP") is a packet-switched technology where information is broken up into packets that are transmitted individually and can take different routes to their common destination. This technology also allows multiple data streams to be transmitted more efficiently over a single route as compared to a switched circuit.

⁴ See generally *In the Matter of Connect America Fund et al., Report and Order and Further Notice of Proposed Rulemaking*, WC Docket No. 10-90 et al., 26 FCC Rcd 17663 (2011), appeal pending, In Re: FCC 11-161, No. 11-9900 (10th Cir.) (the "*FCC Transformation Order*").

PSTN to IP-enabled network components and infrastructure. NTCA is unquestionably correct that the Commission's focus in any consideration of the on-going TDM-to-IP transition must be to "promot[e] and sustain[] the ongoing IP evolution – all while making sure to hearken back ultimately to the core objectives of protecting consumers, promoting competition and ensuring universal service."⁵ Likewise, NTCA's suggestion to fine-tune regulatory requirements is also appropriate.⁶ This framework is consistent with the structure required by the Communications Act of 1934, as amended (the "Act").

AT&T has failed to demonstrate that the evolution of the PSTN, which currently makes widespread use of TDM technology,⁷ to an IP-based network should somehow replace, on a wholesale basis, the underlying statutory and regulatory construct under which telecommunications services and telecommunications service networks are and have been deployed. To that end, NRIC was prescient when it expressed its concerns, in the context of the *FCC Transformation FNPRM*, that carriers may contend that "the migration from TDM to IP has somehow magically changed the PSTN into a new network subject to new rules outside the existing statute."⁸ The *AT&T Petition* has reaffirmed NRIC's concerns even beyond its concerns

⁵ *NTCA Petition* at 15.

⁶ *See id.* at 9-10.

⁷ NRIC notes that AT&T has provided no facts with respect to the extent to which it has deployed IP-based technology within its local networks or, for that matter, within its long distance network.

⁸ *See* Comments of the Nebraska Rural Independent Companies in Response to Sections XVII.L through R of the Further Notice of Proposed Rulemaking, WC Docket No. 10-90 *et al.*, filed February 24, 2012 ("*NRIC February 24th FCC Transformation Comments*") at 28.

stated in response to the *FCC Transformation FNPRM*. Through the *AT&T Petition*, AT&T seeks the Commission's imprimatur on the concept that the natural evolution of technology within the PSTN creates a new network that effectively requires abandonment of the existing statutory framework and rules applicable to the PSTN. The logical ramifications of AT&T's approach would run afoul of the Act, preempt states and abandon the use of a properly constituted regulatory structure to address disparate market power of entities operating within the telecommunications service marketplace. These ramifications arising from the *AT&T Petition* should be rejected.⁹

II. THE NTCA PETITION PROVIDES A MORE BALANCED, FACT-BASED APPROACH TO ADDRESS THE EVOLUTION FROM TDM-TO-IP WITHIN THE PSTN AND IS MORE LIKELY TO PRODUCE PUBLIC POLICY THAT IS LEGALLY SUSTAINABLE AND RATIONAL.

A. NTCA's Suggested Confirmation of Existing Interconnection Requirements and Near-Term Economic Incentives should be Adopted.

NTCA suggests that the FCC proceeding should include consideration of injecting targeted near-term economic incentives to prompt greater investment in IP-enabled infrastructure, particularly in rural areas served by interstate rate-of-return ("ROR") incumbent local exchange carriers ("ILECs") which are currently experiencing the effects of insufficient federal universal service support. Like NTCA, NRIC has a "strong interest in ensuring that this ongoing IP evolution is a near- and long-term success."¹⁰ Accordingly, the Commission should

⁹ Verizon recently requested similar broad efforts to alter the current regulatory structures. See *Ex Parte* Letter of Verizon, GN Docket No. 13-5, dated January 15, 2013 at 3-6.

¹⁰ *NTCA Petition* at 3.

pursue the actions suggested by NTCA as each should create incentives for accelerated deployment of IP elements within the PSTN.

1. **NTCA's suggestion that the FCC should confirm existing interconnection requirements as amplified herein is necessary for the continued evolution of the PSTN including those networks that are IP-based.**

In order to place these targeted near-term incentives in proper context, NRIC supports NTCA's position that the FCC should "confirm that all interconnection for the exchange of traffic subject to sections 251 and 252 is governed by the [Act], regardless of the technology used to achieve such interconnection . . ."¹¹ As amplified herein, this confirmation should reconfirm the basis upon which the PSTN was established and which is necessary to advance the continued evolution of IP-based networks as part of the PSTN.

NRIC notes that the confirmation of this fact by the FCC could be seen as unnecessary since, for example, the FCC has properly observed that "section 251 of the Act is one of the key provisions specifying interconnection requirements, and that its interconnection requirements are technology neutral – they do not vary based on whether one or both of the interconnecting providers is using TDM, IP, or another technology in their underlying networks."¹²

Nevertheless, the confirmation that NTCA seeks should be granted if doing so avoids arguments about the continuing validity of these FCC observations. Moreover, in granting this aspect of the *NTCA Petition*, the Commission can also avoid any further uncertainty by making four specific

¹¹ *Id.* at iii (emphasis in original).

¹² See *FCC Transformation FNRRM* at ¶1342.

corollary confirmations in the interconnection area. NRIC has already demonstrated these four actions to be in the public interest and fully justified. Thus, the FCC should confirm that:

1. Entities meeting the definition of “common carriers” are telecommunications carriers regardless of transport protocol used;
2. Entities that are telecommunications carriers have the right to seek IP-to-IP interconnection from an ILEC under Section 251 of the Act;
3. Entities that seek interconnection under Section 251 of the Act are eligible to have any unresolved issues determined under the procedures and standards found in Section 252 of the Act; and
4. Entities are prohibited from imposing interconnection requirements upon an ILEC that are superior to those (i.e., are “more” than equal to those) provided by the ILEC to its end users or to its affiliates.¹³

As earlier explained by NRIC, these four rules, among other things, “are the foundations for the current Section 251/252 framework, which has been developed in many orders and case decisions over the last 16 years.”¹⁴ Reaffirming and applying this framework will avoid the uncertainty associated with a carrier’s potential assertion that its regulatory status has been transformed by use of a particular protocol to exchange traffic and should help avoid instances of unfair market advantage such as, for example, when carriers suggest their status has been somehow transformed because they use a particular protocol to exchange traffic.

¹³ *NRIC February 24th FCC Transformation Comments* at 27.

¹⁴ *Id.* at 28.

2. NTCA's near-term economic incentives are rational and should be adopted.

NRIC agrees with NTCA's suggested near-term incentives for encouraging IP-based networks. First, NRIC agrees with NTCA that if one set of carriers can assess intercarrier compensation-like charges for IP-based services such as charges for transiting¹⁵ it would be legally questionable how to preclude the assessment of charges by the other network providers for access to their networks. Second, NRIC also agrees with NTCA that the deployment of IP-enabled networks would be accelerated if the FCC ensures that the federal Universal Service Fund ("USF") disbursements are sufficient and predictable and expanded to include middle mile transport costs where Eligible Telecommunications Carrier ("ETC") provision of broadband access is involved.¹⁶

As to this latter near-term incentive proffered by NTCA, NRIC respectfully submits that the Commission needs to now evaluate the level of federal USF available for disbursement and determine the additional amounts required for *all* rural areas of the nation. In the absence of these additional USF amounts, the promised benefits of broadband access to rural areas as noted

¹⁵ See *NTCA Petition* at 14, n.20.

¹⁶ See *NTCA Petition* at 15. NRIC recognizes that the recovery of middle mile transport was raised in the *FCC Transformation FNPRM*, and that comments and reply comments have been filed. See *FCC Transformation FNPRM* at ¶1035; see also Comments of the Nebraska Rural Independent Companies in Response to Sections A through K of the Further Notice of Proposed Rulemaking, WC Docket No. 10-90, *et al.*, filed January 18, 2012 at 77-86. Nevertheless, in acting on the *Petitions*, NRIC respectfully submits that the Commission should expand the federal Universal Service Fund recovery levels to include middle mile facilities.

by NTCA,¹⁷ as well as the ubiquitous deployment of IP-enabled networks, will not be fully realized.

B. The Decisional Framework Articulated in the *NTCA Petition* will Provide Stability and Predictability for All Affected Carriers.

NTCA recommends that the Commission adopt “near-term . . . measures to stimulate and sustain investments in IP-enabled networks.”¹⁸ In doing so, NTCA also recommends that the Commission should:

act on these and similar near-term measures as may be developed in this rulemaking with an eye toward both the immediate and long-term benefits they could provide in promoting and sustaining the ongoing IP evolution - all while making sure to hearken back ultimately to the core objectives of protecting consumers, promoting competition, and ensuring universal service.¹⁹

NRIC agrees.

As NTCA notes, a measured, methodical approach, based on facts regarding the need to identify those regulatory requirements that undermine the on-going deployment of IP-based network components, should “signal to lenders, investors, and operators that those frameworks will be subject to prompt review and potential upgrades on a surgical, thoughtful and targeted basis.”²⁰ Identifying and then addressing those elements that require change should achieve

¹⁷ See *NTCA Petition* at 15, n.21.

¹⁸ *Id.* at 15.

¹⁹ *Id.*

²⁰ *Id.* at 12.

stability in the industry. Thus, NTCA is correct when it notes that the “balanced”²¹ approach reflected in the *NTCA Petition* is necessary in order to “promote regulatory certainty and the core statutory objectives by starting from a well-known, time-tested existing baseline of legal and regulatory requirements.”²² Contrary to AT&T’s proposition, this “baseline of legal and regulatory requirements” cannot effectively be abandoned wholesale without doing great harm to the very legal structure and the resulting public policy basis that requires carriers to interconnect with other carriers on just, reasonable and non-discriminatory rates.

In the absence of the measured, fact-based approach that the *NTCA Petition* fosters, the wholesale abandonment of the regulatory structure for interconnecting carriers in place today under Title II of the Act would wreak havoc and lead to financial and planning instability for smaller carriers. These smaller carriers are the very small businesses that are often noted as the engines of economic growth.²³ No place is this conclusion more apparent than in the rural areas

²¹ *Id.* at 11.

²² *Id.* at 12.

²³ See, e.g., <http://abcnews.go.com/blogs/politics/2011/08/obama-unveils-new-initiatives-to-spur-job-growth-in-rural-areas/> (“Half of the people who work in America either own or work for a small business, and two out of every three private sector jobs are created by small business,” said SBA administrator Karen Mills. “This is intensely true in rural areas. Small businesses of all kinds are thriving in rural areas.”) As President Obama had indicated (<http://www.whitehouse.gov/the-press-office/2011/08/16/opening-remarks-president-white-house-rural-economic-forum>):

The question is if we’re going to harness the potential to create jobs and opportunities that exist here in Iowa and all across America. We know what’s possible if we’re willing to fight for our future and to put aside the politics of the short term and try to get something done. Already this administration has helped nearly 10,000 rural businesses and 35,000 small and medium-sized farms and ranches to get the financing that they need -- that’s already happened.

of the nation such as those served by the NRIC members.

Accordingly, NRIC supports the fact-based analytical framework being suggested by NTCA for efforts to promote the continued evolution of the PSTN from a TDM-based network to an IP-based network.²⁴ The review of regulations being suggested by NTCA appears entirely consistent with the periodic review by the FCC of its regulations regarding providers of telecommunications service as required by statute.²⁵

But the rural economy is still not as strong as it could be. That's why I created a Rural Council to look for ways to promote jobs and opportunity right now. And this council has come up with a number of proposals, and we're not wasting time in taking up these proposals; we want to put them to work right now.

So today, I'm announcing that we're ramping up our efforts to get capital to small businesses in rural areas. We're doubling the commitment we've already made through key small business lending programs. We're going to make it easier for people in rural areas looking for work to find out about companies that are hiring. We're going to do more to speed the development of next-generation biofuels, and we're going to promote renewable energy and conservation. We're going to help smaller local hospitals in communities like this one to recruit doctors and the nurses that they need. And those are just some of the things that we're already announcing today. The reason we brought you all together is because I'm looking forward to hearing from you about what else we can do to jumpstart the economy here in rural America.

We can create opportunities for training and education and good careers in rural America so young people don't feel like they've got to leave their hometowns to find work. We can strengthen the middle class, restore that sense of economic security that's been missing for a lot of people for way too long. We can push through this period of economic hardship and we can get to a better place. That's why we're here together. That's what this forum is all about.

²⁴ *NTCA Petition* at 11.

²⁵ *See* 47 U.S.C. §161(a) ("In every even-numbered year (beginning with 1998), the Commission – (1) shall review all regulations issued under this chapter in effect at the time of the review that apply to the operations or activities of any provider of telecommunications service; and (2) shall

1. The *NTCA Petition*'s framework will result in fact-based decisions to support rational public policy that will benefit all affected entities.

The analytical framework proposed by NTCA is appropriate and should be adopted.

NRIC respectfully submits that this conclusion is proper because NTCA's framework is rational, is measured, and relies on fact-based demonstrations to justify any necessary regulatory changes.

NTCA's first step would result in fact-based decision-making by requiring parties to identify the "specific existing regulations" that are, in effect, impediments to the migration of networks to IP-based platforms,²⁶ and then to make such demonstrations based on "technological change, competitive forces, or other regulatory, market, or economic developments" that support such change.²⁷ These demonstrations are necessary so that the FCC and interested parties can test the assertion, based on real-world facts and not merely generalized assertions, that changes in regulation are necessary. Rational public policy and regulations arise from these very fact-driven requirements and are thus integral to achieving the cornerstones of consumer interests, universal service and competition upon which the *NTCA Petition* is based.²⁸

Once these facts are developed, applying those facts to the issue of whether any identified regulation should be eliminated, retained or modified²⁹ would offer a greater degree of consumer protection and regulatory predictability. The focus first on consumer protection and secondly on

determine whether any such regulation is no longer necessary in the public interest as the result of meaningful economic competition between providers of such service."

²⁶ *NTCA Petition* at 11.

²⁷ *Id.*

²⁸ *Id.* at 15.

²⁹ *Id.* at 11.

predictability, in turn, is the very measured approach that NTCA seeks. This approach will benefit not only all consumers, but also the carriers that serve those consumers, state commissions that oversee those carriers and care of the consumers within their jurisdiction, and the FCC alike.³⁰ Knowing the potential end-result of potential regulatory changes will assist carriers in better planning and deployment of IP enhancements within their existing networks and will help financial firms to assess the reasonableness of loan commitments required for such investments.³¹ Moreover, and most importantly, under NTCA's approach, consumers would not be subjected to any untoward results (such as call completion issues currently being experienced in rural areas) that may result from a regulatory structure that lacks the proper degree of regulatory oversight.

State commissions, in turn, with their own regulatory oversight preserved, could evaluate similar approaches for the network regulation and requirements entrusted to them under state law, including whether alteration of state carrier-of-last-resort ("COLR") requirements is necessary. State commissions could undertake that oversight through fact-based determinations of federal regulatory requirements that have been retained, eliminated or modified, and

³⁰ NRIC notes that there is no need for new terminology, i.e. the use of "publicly routed communications network" (*id.* at 2) and the concept of "smart" regulation (*see, e.g., id.* at 11) – in addressing the issues raised by the *Petitions*. Such terminology could result in definitional ambiguities and loopholes that could then be exploited. Relying on existing terminology that is well known in the telecommunications industry helps avoid such results.

³¹ *See Ex Parte Notice, CoBank, May 8, 2012, Connect America Fund*, WC Docket No. 10-90 *et al.* at 1 (according to CoBank, "[t]he various caps and limitations on universal service funding and inter-carrier compensation, especially for rate-of-return carriers, are making it increasingly difficult for us to extend credit for the purpose of deploying ubiquitous rural broadband networks.").

determine if the same conclusions should apply in the state jurisdiction. As an added benefit, NTCA's balanced, measured structure should produce greater involvement between the FCC and state commissions that is consistent with the dual authority under the Act and one that will also advance the federal-state partnership associated with universal service.³²

Furthermore, the NTCA approach will create other benefits. Relying on facts and the proper legal framework, the FCC will be able to move forward with a regulatory framework based on law, facts, and rational public policies, the very hallmarks that NTCA's framework is intended to achieve. Consumers and carriers have a right to rational and structured changes that allow the proper provision of service and the continued deployment of networks that provide jobs and economic growth to all sectors of the economy, including rural areas.

For all of these reasons, the FCC should adopt the framework contained in the *NTCA Petition*. Moving forward in this manner will result in a framework for the continued evolution and migration of TDM-based networks to IP-based networks that is fact-based, legal and based on rational public policy.

2. The public interest would be served through adoption of NTCA's decisional framework.

For the reasons stated in the preceding parts of this Section II, the Commission should

³² See, e.g., *FCC Transformation Order* at ¶ 611; see also *In the Matter of Connect America Fund, et al., Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking*, WC Docket No. 10-90 *et al.*, FCC 11-13, released February 9, 2011 at ¶¶84-85. As the FCC has also indicated, the United States Court of Appeals for Tenth Circuit has indicated "the Act 'plainly contemplates a partnership between the federal and state governments to support universal service' and that same court also indicated that 'it is appropriate - even necessary - for the FCC to rely on state action.'" *Id.* at ¶85 quoting *Qwest Corporation v. FCC*, 258 F.3d 1191, 1203 (10th Cir. 2001).

adopt both the framework and the near-term incentives that NTCA articulates in the *NTCA Petition*. Public policy based on fact-finding and legally sustainable structures are the hallmarks of rational decision making, and they are fostered through the *NTCA Petition*. With the addition of the suggested near-term incentives for the further deployment of IP-enabled networks, the *NTCA Petition* offers the basis for a constructive, rational regulatory platform from which the objectives of deployment of additional IP functionality can be measured, encouraged, and achieved. The *NCTA Petition* builds upon the legal frameworks upon which smaller networks and providers have relied to provide service to rural areas. Thus, the *NTCA Petition* framework should be adopted.

III. *AT&T'S PETITION SHOULD BE REJECTED BECAUSE IT LACKS A FACTUAL, LEGAL AND RATIONAL PUBLIC POLICY BASIS.*

NRIC is not questioning that the migration of the PSTN from TDM-based networks to IP-based networks is continuing, should continue, and should be the end result of the natural evolution of technology that has been the hallmark of the PSTN to date. However, the PSTN is a series of interconnected carrier networks, and those interconnections has been established through the application of statutory and regulatory decisions that appear to be brushed aside by the framework being proposed in the *AT&T Petition*. Unlike the fact-based, reasoned approach being suggested in the *NTCA Petition*, AT&T's proposal raises significant concerns with respect to the continued IP evolution for rural areas, particularly those areas served by smaller rural carriers such as the NRIC members. The *AT&T Petition* attempts to have the Commission place its imprimatur on this approach without sustainable factual, legal or rational public policy bases. Accordingly, for the reasons stated herein, NRIC respectfully submits that the FCC should reject the *AT&T Petition*.

A. The *AT&T Petition* is Based on Two Questionable Premises Regarding the Transition from TDM-to-IP Transmission.

AT&T's contentions are based on two questionable premises which, in turn, undermine the factual, legal and public policy base of the *AT&T Petition*. First, AT&T contends that the transition from TDM-to-IP creates two distinct networks. Second, AT&T contends that the transition from TDM-based networks to IP-based networks fundamentally changes the legal status of the underlying network and the carriers that provide the service over such networks. AT&T has failed to demonstrate that these premises are correct

1. AT&T incorrectly suggests that the transition from TDM-to-IP creates two distinct networks.

AT&T argues that, during the conversion from TDM networks to IP networks, current regulation requires ILECs "to invest large sums to maintain redundant and costly TDM networks" even after the ILECs have implemented replacement IP networks.³³ AT&T's claim that it is necessary for carriers to run two parallel networks operating at the same time during the conversion from TDM-to-IP evolves as further network investment and deployments take place is inconsistent with the operational experience of NRIC's member companies. Further, AT&T has not demonstrated the amount of investment needed to maintain parallel networks even assuming that two networks are required. In NRIC's member companies' experience, the evolution from TDM-to-IP allows carriers to retire one type of investment with a new, more efficient type of investment in an incremental rather than wholesale manner. This evolution occurs as a business case is developed for deployment, as depreciated or obsolete equipment is

³³ *AT&T Petition* at 5.

replaced, and as funding is available for investment in these technologies.

From a practical operating perspective and unless required to do so by the existence of certain specific 47 U.S.C. §251(c)(3) unbundling requirements,³⁴ it is unlikely that a carrier will continue to operate and maintain copper facilities at a subscriber location where fiber has been installed. AT&T's claim that legacy regulation siphons away investment from next-generation facilities³⁵ is not supported by the operating experience of the NRIC member companies and, in any event, AT&T's claim should be accepted only if demonstrated with real world facts.

AT&T also argues that the core obligations on ILECs largely remain in place and preclude service providers from retiring legacy TDM networks in response to technological change and market demand.³⁶ According to AT&T, legacy regulations require ILECs to dedicate substantial resources for an antiquated network and outdated service, thus hindering their ability to make the investments necessary to achieve ubiquitous broadband deployment,³⁷ and therefore

³⁴ NRIC recognizes certain types of ILECs' obligations exist pursuant to, for example, 47 C.F.R. §§51.319(a)(1) to 51.319(a)(3). For those ILECs subject to the unbundling obligations of 47 U.S.C. §251(c)(3), the Commission does not require such ILECs to provide unbundled access to new Fiber-to-the-Home (FTTH) loops for either narrowband or broadband services. Regarding "overbuild" deployment in which an incumbent LEC constructs fiber transmission facilities parallel to or in replacement of its existing copper plant, the Commission ensured continued access to an unbundled transmission path suitable for providing narrowband services to customers served by FTTH loops. In this situation, the ILEC has the option to either (1) keep the existing copper loop connected to a particular customer location after deploying FTTH or (2) provide unbundled access to a 64 kbps transmission path over its FTTH loop. *See* 47 C.F.R. §51.319(a)(3)(iii).

³⁵ *See AT&T Petition* at 2.

³⁶ *See id.* at 10.

³⁷ *See AT&T Comments on NBP Public Notice #25-On the Transition From Legacy Circuit-switched Network to Broadband*, p. 12.

driving up costs and diverting resources from the advanced broadband network.³⁸ Citing the National Broadband Plan (“NBP”), AT&T requests that the Commission should initiate a proceeding to “ensure that legacy regulations and services do not become a drag on the transition to a more modern and efficient use of resources.”³⁹ Yet, the language in the NBP cited by AT&T⁴⁰ is *nothing other* than the language AT&T previously submitted to the Commission in comments responsive to the NBP Public Notice #25.⁴¹ Therefore, whether requirements exist for AT&T or other carriers to simultaneously operate and maintain two separate and distinct networks and whether current regulations are diverting investment away from the IP ecosystem is yet to be determined by the Commission based upon a fact-based analysis.⁴²

³⁸ See *AT&T Petition* at 13.

³⁹ *Id.* at 2 quoting NBP at 59.

⁴⁰ According to AT&T, the NBP recognizes that “requiring ‘an incumbent to maintain two existing networks...reduces the incentive for incumbents to deploy next generation facilities and ‘siphon[s] investments away from new networks and services.’” *Id.* at 2 quoting NBP at 2.

⁴¹ See AT&T Comments on NBP Public Notice #25-On the Transition From Legacy Circuit-switched Network to Broadband, at 12.

⁴² AT&T’s reliance on cites in the NBP (see *AT&T Petition* at 1-2) as “authored” by the Commission (*id.* at 1), which cites AT&T comments in NBP Public Notice #25 could be misread. As indicated in the preface of the NBP, the “staff of the . . . [FCC] created the National Broadband Plan.” NBP, Preface at 1. Moreover, as noted by the FCC in its March 16, 2010 News Release at 2, the “Plan was mandated by the American Recovery and Reinvestment Act in February 2009 and produced by an FCC task force that set new precedents for government openness, transparency, and rigor. . . . About half of the Plan’s recommendations are addressed to the FCC, while the remainder are for Congress, the Executive Branch, state and local government, working closely with the private and nonprofit sectors.”

Despite claims of current regulatory requirements inhibiting IP-based investment,⁴³ the fact that ILECs and the private sector have invested well over \$1 trillion in broadband networks and IP technology demonstrates that the current regulatory regime has not deterred companies from investing in and transitioning to IP when it makes sense to do so.⁴⁴ Further, considering the evolution/transition from TDM-to-IP, it makes little or no sense to simultaneously operate and maintain two separate networks, especially once the transition is complete.

The existing network architecture is frequently characterized by two defining characteristics: (1) its reliance on TDM to derive individual channels on a common transmission facility (be it copper or fiber), and (2) the use of circuit switching to establish temporary connections between TDM channels on different facilities.⁴⁵

The transition to IP networks is an architectural response to the importance and prominence of data communications. The traditional PSTN was designed to support voice service, with data services provided as an overlay. With IP, these roles are reversed; the

⁴³ See, e.g., *AT&T Petition* at 11. NTCA has noted that the smaller ILECs are part of this network evolution to IP-enabled networks (see *NTCA Petition* at 3, n.6), a result placed in jeopardy if the largest carriers are not, among other requirements, subject to interconnection requirements envisioned and implemented under the structure of the Act.

⁴⁴ See *id.* at 3. AT&T recently announced a \$14 billion strategic investment to deploy next-generation services. See *id.* at 8; see also *NTCA Petition* at 6, n.11; *Broadband Investment*, USTelecom Broadband Industry Statistics report, available at: <http://www.ustelecom.org/broadbandindustry/broadband-industry-stats/investment> ("In recognition of the extraordinary value wired and wireless broadband communications offers, private sector broadband investment reached \$66 billion in 2011, and the industry has invested nearly \$1.2 trillion since 1996.").

⁴⁵ See Joseph Gillan and David Malfara, *The Transition to an All-IP Network: A Primer on the Architectural Components of IP Interconnection*, May 2012, National Regulatory Research Institute Report 12-05 ("*Gillan/Malfara NRRI – IP Primer*") at 1-2.

underlying network is designed for data services. By way of example, VoIP is one of a number of data streams, but it is one requiring specialized treatment to ensure high quality.⁴⁶

The technology of the PSTN has changed previously, and the transition of technology and the accommodation of it within regulation is nothing new.⁴⁷ Technology has moved from its roots as an analog network with in-band signaling to its current architecture characterized by high speed fiber transport, digital switching, and call control managed by a parallel signaling network. None of these gradual technological evolutions created an engineering necessity to replace the entire network or create the need or a requirement for a duplicate network, nor did they create a legal basis to depart from the established principle that an integrated distribution, transmission and switching network remains a single telecommunications network, regardless of the protocols that may be used within the various segments of that network.

As has been noted, many rural ILECs are upgrading voice switching systems, replacing

⁴⁶ See *id.* at 5-6.

⁴⁷ The FCC addressing technological evolution and capability within the PSTN is not new. The migration from Multi-Frequency signaling to SS7 signaling allowing the migration to an 800 database architecture and the use of Flex ANI and payphone digits are examples of where that has occurred. See, e.g., *In the Matter of Provision of Access for 800 Services, Report and Order*, CC Docket No. 86-10, RM 5101, 4 FCC Rcd 2824, 2824-2825 (¶2)(1989) (based on record in the proceeding, a determination was made that “it would be technically possible for LECs to offer both data base and NXX access” and requiring both to be offered if the LEC can provide both until call set-up time issues are addressed); *In the Matter of Provision of Access for 800 Services, Memorandum Opinion and Order on Reconsideration and Second Supplemental Notice of Proposed Rulemaking*, CC Docket No. 86-10, 6 FCC Rcd 5421, 5431 (¶53) (1991) (options for Independent Telephone Companies to comply with 800 data base services was confirmed by FCC); *In the Matter of Petition of GCB Communications, Inc. d/b/a Pacific Communications and Lake Country Communications, Inc. for Declaratory Ruling, Declaratory Ruling*, WC Docket No. 11-141, DA 12-1046, released June 29, 2012 at ¶¶ 5 to 8 (recitation of history of the deployment of the technology required to provide payphone coding digits).

them with lower cost IP-enabled soft-switch technology.⁴⁸ Using gateways between IP and TDM devices, many rural carriers today use these soft switches based on IP protocol, as well as IP-based interoffice transmission equipment for both voice and data streams.⁴⁹ Many rural LECs also use IP-protocol handsets at some locations as well. Therefore, while NRIC understands the real-world costs associated with the maintenance and deployment of two discrete network technologies within the same network, NRIC nevertheless questions the impression conveyed by AT&T that, with a turn of the switch, AT&T will deploy a distinct “replacement IP network[]” while fully maintaining its TDM network.⁵⁰ Rather, it seems likely that AT&T has done the same thing that NRIC member companies have done, namely, to gradually replace older equipment with newer equipment that is less costly and that uses more efficient protocols, especially for large-capacity fiber transmission and switching.

NRIC is also concerned with the universal service ramifications arising from AT&T’s complaint that it and other ILECs still must be prepared to serve every household in their service territories on demand as a Carrier of Last Resort (“COLR”).⁵¹ AT&T has previously argued that the FCC should make clear that states are bound by the FCC’s preemptive reforms, including prohibiting COLR requirements that could force carriers to continue to maintain TDM networks

⁴⁸ See NECA, Trends 2010- *A report on rural telecom technology* (“NECA Study”) at 9; see also *NTCA Petition* at 3, n.6.

⁴⁹ See NECA Study at 9.

⁵⁰ *AT&T Petition* at 5.

⁵¹ See, e.g., *id.* at 10.

and services.⁵² Yet COLR obligations, which require ILECs to serve all subscribers upon reasonable request, regardless of location, do not mandate the technology used to serve all subscribers or any segment of subscribers.

At the same time, NRIC notes that the decision concerning which technology an ILEC chooses to serve segments of subscribers, whether TDM, IP, or a combination of both during the transition to IP, ultimately rests with the ILEC. A carrier could choose not to expend the capital resources to deploy the latest technology, especially in its highest cost areas, but this is a choice, (albeit this choice may be severely limited because of the very high cost in low density areas) not a requirement. Where such choice is made and a carrier does not opt to provide all of its subscribers with the latest technology, such carrier may in fact provide service using both TDM and IP to separate portions of its subscriber base. However, for an ETC (which NRIC understands is a class of carriers that includes certain of AT&T's operating entities),⁵³ these choices must be consistent with its universal service provider status. Thus, whether it is AT&T or some other ETC, the Commission (along with the state commissions) must not allow an ETC to disregard the universal service principles articulated in Section 254 by efforts to restrict state's COLR obligations. To this end, NRIC applauds Commissioner Rosenworcel who properly stated that

⁵² See *id.* at 15-16; see also Letter from Robert W. Quinn, Jr. Senior Vice President, Federal Regulatory and Chief Privacy Officer, AT&T to Ms. Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket No. 10-90 *et al.*, dated August 30, 2012.

⁵³ See generally 47 U.S.C. §214(e).

as we transition to new technologies, we must ensure that no American is left behind. At least ten states have enacted legislation to relieve carrier of last resort obligations. We must understand what that means. We need to understand how it impacts rural consumers. Because, as a matter of public policy, we must make sure that modern communications are available in urban America, rural America, and everything in between.⁵⁴

Therefore, instead of leaving consumers in rural and high-cost cost areas to fall behind the technological curve or allowing service to them to be abandoned altogether, the Commission and the states can and should prevent this result by creating investment incentives in rural and high-cost areas through proper funding levels in both federal and state universal service funds.

One immediate method of creating these incentives is to expand the FCC's announced "budgets" for various high-cost programs.⁵⁵ These budget limits can be addressed, in NRIC's view, with the expansion of the contribution base, a topic on which the FCC has received comments and reply comments.⁵⁶ Accordingly, NRIC encourages the Commission to address expanding the contribution base to increase USF recovery for ETCs coincident with issues raised by the evolution of the PSTN from TDM-based transmission technology to IP-based transmission technology.

⁵⁴ Remarks of Commissioner Jessica Rosenworcel, Practicing Law Institute, 30th Annual Telecommunications Policy and Regulation Institute, Washington, DC December 13, 2012, at 4.

⁵⁵ Despite the remarkable and efficient progress of small rural carriers to date in the IP evolution (*see NTCA Petition* at 3, n. 6), there is serious risk that they -- and more importantly, their consumers and communities -- will be left behind (or left out altogether) over time in the absence of sufficient and predictable support that facilitates their continuing participation in the IP evolution.

⁵⁶ *See generally In the Matter of Universal Service Contribution Methodology et al., Further Notice of Proposed Rulemaking*, WC Docket No. 06-122 *et al.*, FCC 12-46, released April 30, 2012.

2. AT&T incorrectly suggests that the transition from TDM-to-IP fundamentally changes the legal status of the PSTN, with no common carrier or universal service obligations.

As discussed above, the network is in transition from a TDM-based network to one that is IP-based. AT&T attempts to leverage this technological evolution regarding transmission protocols for the proposition that a completely new regulatory structure for telecommunications carriers is now required. Under its scheme, AT&T suggests that an IP-enabled network can provide only “information services” as defined under federal law and therefore state regulation of both the services and the network is wholly preempted by federal authority.⁵⁷ In other words, AT&T is suggesting that, by converting its network from TDM voice switches to IP routers, a carrier can fundamentally change the regulatory structure under which it operates. AT&T’s proposition cannot be reconciled with central concepts of network organization nor the statutory language in the Act.

NRIC respectfully submits that, as a matter of law, rational public policy and fact, the transition from TDM-to-IP does not change the legal status of the PSTN. Specifically, the decision to convert a voice network’s transmission protocol partially or totally to IP technology:

- Does not convert a voice service from a telecommunications service to an information service; and
- Does not change the underlying network from a regulated telecommunications services network to a non-regulated, non-common carrier information services network.

⁵⁷ See *AT&T Petition* at 18.

a. Network layers.

AT&T's contentions have not been reconciled with the layering concepts that have become the accepted basis of all modern telecommunications network design. One articulation of those layering concepts is found in the OSI Model,⁵⁸ a widely accepted network design plan for data networks⁵⁹ that can also be applied to PSTN networks.⁶⁰

The OSI Model contains seven layers. Equipment at each of the two ends of a connection exchange information at each layer. Each layer uses lower layers as building blocks and assumes the successful operation of those lower layers. Similarly, each layer provides a base upon which higher layers can rely. Network equipment and software can and often does act independently of other layers, although some products perform the functions in multiple layers. The highest layer is the "application." In a VoIP telephone call, the customer interface to the VoIP software exists at layer 7. In a network that uses IP protocol, the routing and addressing functions operate at Layer 3, the "Network" layer.⁶¹ This replaces the circuit switching function in a TDM network. The layers are generally explained in the following table.

⁵⁸ The OSI Reference Model was developed by the International Organization for Standardization to depict Open Systems Interconnection.

⁵⁹ Alternatives to the OSI model have also been adopted, such as the "SNA" protocol at IBM. For a time, the U.S. government required that all networking projects must be OSI compliant. The European Union has imposed the OSI model for some applications. Although TCP/IP eventually pushed OSI aside as a standard, the reference model remains valuable. Ray Horak, *Telecommunications and Data Communications Handbook*, John Wiley & Sons, Inc., 2007 ("Horak"), p. 288.

⁶⁰ See Gillan/Malfara *NRRI -- IP Primer*, *supra* n. 45, at 16-18.

⁶¹ See generally *id.* at 18.

OSI Layer	Function
Layer 7 (Application)	Represents the actual service (e.g., telephone call) as perceived by the end user. It also contains the end-user interface, which conveys the transmitted information to and from the end user.
Layer 6 (Presentation)	Arranges the data from/to the end user into a format that will be understood by the receiving application (for example, audio encoding and decoding, encryption/decryption, and so on).
Layer 5 (Session)	Responsible for the initiation, identification, maintenance, and termination of a particular information exchange or dialog between two or more end users (for instance, to begin and end a specific telephone call).
Layer 4 (Transport)	Provides the protocols that establish a reliable communications path between the sending and receiving end-user devices. Error correction and data flow control of information are two primary functions of this layer.
Layer 3 (Network)	Provides the means for identifying originating and destination end users (for example, telephone numbers), as well as the communications path between networks to be used for connection (for example, the routing and translation functions).
Layer 2 (Datalink)	Responsible for the intelligent conveyance of information between two devices on the same physical network. It includes a framing format that provides error correction, flow control, and acknowledgement processes to ensure the delivery of the frames carrying the information. It is also responsible for access to the physical transmission medium and supports configurations where that medium is shared by multiple devices (for example, SONET) or dedicated devices (point-to-point T-1).
Layer 1 (Physical)	The physical transmission medium used to convey electrical, optical, or radio-frequency signals at the bit level (i.e., digital ones and zeros) from the originating party to the terminating party. Layer 1 can be a twisted-pair, a copper facility, an optical fiber cable, a coaxial cable, a radio or free-space optical frequency, or another transmission medium.

Table 1. OSI Levels in a VoIP call.⁶²

⁶² See *id.* at 13-14.

This structure illustrates how the *AT&T Petition* conflicts with network engineering tenets. Specifically, AT&T's propositions seem to be that when a carrier uses IP technology in the Network Layer (Layer 3), at least two legal consequences follow:

1. All services offered at the application level (Layer 7) are "information services" and are federally preempted; and
2. All physical transmission media (Layer 1) are federally preempted.

AT&T's propositions are highly questionable, even though each layer assumes the existence of functioning lower layers. The network layers are expressly designed so that they can act independently. If the layers *do not* interact with each other as a matter of engineering, there also can be *no* legally sustainable basis to suggest that a protocol change at Layer 3 transforms the entire structure into an information service. AT&T's argument makes sense only if one believes that the transmission technology at Layer 3 somehow transfigures the PSTN into something quite different, but AT&T has provided no engineering basis for such a proposition. As the following section explains, AT&T has also provided no sustainable legal basis either.

b. Statutory issues.

In two important ways, the Act reflects the concept that a change of transmission technology within a network does not alter the jurisdiction over the services provided through that network when that technology is used to manage, control or operate the network or manage the telecommunications service being provided. First, the Act defines "telecommunications service" in a way that looks to the service that the carrier is "offering" to the public, and it

expressly disregards “the facilities used” to do so.⁶³ Second, the Act makes a parallel exclusion from “information service,” which is defined as:

the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, *but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.*⁶⁴

A carrier’s decision to convert some or all network equipment to IP protocol is clearly an issue of the facilities it uses and of how that carrier manages, controls and operates its network. Yet, AT&T’s proposition is that the use of IP protocol somehow transforms a telecommunications service into an information service. This view cannot be reconciled with either the Act’s definition of telecommunications service (which, as explained above does not depend on the “facilities used”) or the “does not include” language quoted above from the statutory definition of information service. AT&T cannot successfully maintain that the technological shift in a network’s transmission technology from TDM-to-IP converts that network from a telecommunications network into something else. While the shift to IP technology does change the technology that manages existing network, it has no more ability to create a new category of regulation than did the historical conversion from electro-mechanical to electronic switches, the introduction of multiplexers on heavily used circuits, or the introduction

⁶³ See 47 U.S.C. § 151(53).

⁶⁴ 47 U.S.C. §153(24) (emphasis added).

of Integrated Service Digital Network (“ISDN”), ATM, and frame relay services, which are also packet technologies.⁶⁵

The Commission has previously taken an analytical approach to defining telecommunications services that is directly contrary to AT&T’s proposition here. In the 2005 *Brand X* decision, the Supreme Court upheld the Commission’s decision that cable modem service is an information service. The central statutory question focused on what a provider “offers” to the cable modem customer,⁶⁶ and specifically, whether the transmission component is sufficiently integrated with the finished service to make it reasonable to describe the two as a single, integrated offering. The Court held that it was reasonable for the Commission to decide that cable modem service consists of an integrated package of transmission and Internet service “because the transmission is a necessary component of Internet access.”⁶⁷ AT&T’s proposition here takes the opposite approach to defining information service. Rather than examine whether the Application Layer (Layer 7) is an integrated service, AT&T flips the logic, proposing that the network should be declared an information service if its internal facilities shift from TDM-to-IP, regardless of the character of its retail services.

⁶⁵ ISDN offers circuit-switched connections for either voice or data and packet-switched connections for data. See Wikipedia *Integrated Services Digital Network* and Wikipedia *Frame Relay* (accessed 1/15/13).

⁶⁶ See 47 U.S.C. § 151(53) (“telecommunications service” defined in part on the basis of what is offered to the public for a fee).

⁶⁷ *National Cable & Telecommun. Ass’n. v. Brand X Internet Services*, 545 U.S. 967, 990 125 S.Ct. 2688, 2705 (2005).

AT&T's specific proposition here has also previously been rejected by the Commission. The *FCC IP-in-the-Middle Order*⁶⁸ recognized that a carrier's use of IP technology within a portion of its network did not reduce that network's regulatory obligations. The Commission held that AT&T's "phone-to-phone" IP telephony services were required to pay access charges normally owed for circuit-switched interexchange calls. Customers using this service initiated a call in the same manner as a traditional interexchange call, and the calls were terminated through local telephone company lines. The difference was that within its own network AT&T had converted these calls to IP format, transmitted the calls over an IP backbone, and then converted the calls back to TDM for delivery. The Commission's decision relied on the fact that the service did not accomplish a "net protocol conversion" in the sense originally applied by the Commission's Computer Inquiries since there was no net change to the message's form or content.⁶⁹ Applying this same test to an all-IP network, there is no "net protocol conversion" when a voice call begins and ends with audible voices, regardless of whether one or both handsets use IP technology at the network layer (*i.e.*, Layer 3 discussed in Table 1). Therefore, the use of IP in the middle was held then and still is irrelevant to regulatory obligations of the carriers. Any contrary conclusion could be particularly problematic for mixed technology calls where, for example, a *calling* party's carrier uses IP technology and the *called* party is reached using TDM technology. AT&T's proposition would suggest that either: (1) the called party's

⁶⁸ *In the Matter of Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges, Order*, WC Docket No. 02-361, 19 FCC Rcd 7457 (2004) ("*FCC IP-in-the-Middle Order*").

⁶⁹ *Id.* at ¶ 4.

equipment prevents the call from being an information service since a portion of the call's path is using TDM technology; or (2) the calling party's call is an information service because it uses IP technology while the called party's call is a telecommunications service. Either interpretation would create a new set of uncertainties in the telecommunications industry. Such uncertainties would only grow as networks evolve toward greater use of IP-based protocols since whether a voice call remains a "telecommunications service" would depend on whether a sufficient portion of the network handling that call has been converted to IP, a fact that is often unknowable to the customer. These results should be avoided.

Finally, sections 251 and 252 of the Act also are contrary to AT&T's proposition. As the Commission itself has recently noted, the interconnection requirements of Section 251 are technology-neutral as between TDM and IP formats. Specifically, as NRIC has already noted,⁷⁰ the Commission stated: "... section 251 of the Act is one of the key provisions specifying interconnection requirements, and that its interconnection requirements are technology neutral—they do not vary based on whether one or both of the interconnecting providers is using TDM, IP, or another technology in their underlying networks."⁷¹

B. The *AT&T Petition* has Extremely Broad Scope, is Inconsistent with the Act, and is Likely to Create Chaos in Connection with the Provision of Telecommunications Services to Rural America.

Although the *AT&T Petition* nominally seeks a few "trial runs" to learn what barriers might exist to operating an all-IP network, the thrust of the *AT&T Petition* appears aimed at

⁷⁰ See nn. 11 and 12, *supra* and accompanying text.

⁷¹ See *FCC Transformation FNPRM* at ¶1342.

eliminating much of the regulatory structure put in place by Congress and the preemption of the statutorily recognized role of state commissions under the Act. For the reasons stated below, NRIC is greatly concerned that aspects of the *AT&T Petition*, if adopted, would undermine the availability of telecommunications services in rural areas.

In several places in the *AT&T Petition*, AT&T implies that an IP-enabled network should exist in a deregulated marketplace by:

- Eliminating federal and state “service-obligation rules” in rural areas, presumably meaning COLR requirements, for TDM-based services and permit no COLR oversight whatsoever for IP-based services;⁷²
- Granting carriers permission to notify their customers that the carriers “will no longer provide [the customers with] legacy services once the legacy TDM network is retired,” or alternatively to allow providers to switch customers to an alternative service;⁷³
- Shifting universal service funding to “a rational procurement model” that abolishes compulsory service requirements in rural areas and designating an FTC and USF support only for those carriers that choose to “undertake voluntary service commitments in clearly defined areas”;⁷⁴
- Preempting all state regulation based on the presumption that IP-enabled services are “information services” (apparently including both the services provided over such networks and the existence, quality, and pricing of equipment that comprises these networks);⁷⁵
- Allowing ILECs to retire their TDM networks and discontinue copper loops, apparently whenever and however an ILEC may wish to do so, and without approval from either the Commission or states;⁷⁶

⁷² See *AT&T Petition* at 15-16.

⁷³ See *id.* at 22.

⁷⁴ *Id.* at 17.

⁷⁵ *Id.* at 18.

⁷⁶ See *id.* at 11, 19.

- Discontinuing equal access and dialing parity obligations that benefit long-distance carriers, as well as the distinction between local and long-distance calling;⁷⁷
- Eliminating the Commission's short-term notice-of-network change rules, also as requested by USTelecom;⁷⁸
- Precluding carriers from seeking "TDM-based interconnection or services, including TDM-based tandem transit services or SS7-based signaling" in IP-based wire centers at least with respect to the exchanges that could be the subject of the AT&T-proposed market trials;⁷⁹ and
- Discontinuing "residual obligations" including "requirements related to ONA/CEI, record-keeping, accounting, guidebooks, payphones, and data collection."⁸⁰

AT&T has failed to reconcile this relief with the Act's regulatory framework. Nor can the relief envisioned by AT&T be granted under Section 160's forbearance authority in light of the statutory requirements and the likely effects on consumers and competition.⁸¹ Thus, AT&T cannot sustain its framework without seeking legislative changes to the Act and AT&T's efforts to end-run a variety of provisions in the Act should not be permitted. In a practical sense, AT&T's envisioned structure would create no back stop to ensure that the rates, terms and conditions for the interconnection of networks remain just and reasonable and otherwise advance the public interest, absent expensive, time-consuming and unproductive legal actions. Therefore,

⁷⁷ See *id.* at 19-20.

⁷⁸ See *id.* at 15.

⁷⁹ See *id.* at 21.

⁸⁰ See *id.* at 20.

⁸¹ See 47 U.S.C. §§160(a) and (b).

for these reasons and those discussed below, the regulatory framework envisioned by the *AT&T Petition* should be rejected.

1. Local and long-distance calling.

AT&T argues for termination of equal access obligations derived from the AT&T Consent Decree.⁸² AT&T also states that this distinction “perpetuates an outdated business model” requiring each carrier to “arbitrarily and inefficiently segregate its service offerings into ‘local’ and ‘long-distance’ components.”⁸³ Contrary to AT&T’s view, however, the distinction within the Act between “toll” (defined as “telephone toll service”⁸⁴) and “local” calling service (which is defined as “telephone exchange service”⁸⁵) is a major dichotomy within the foundations of the Act. “Telephone exchange service” is defined in the Act, and is referenced many times within it. To list just a few of such occurrences, “telephone exchange service” is used in: Defining “incumbent local exchange carriers” subject to enhanced interconnection requirements;⁸⁶ defining “rural telephone company;”⁸⁷ defining how carriers become eligible telecommunications carriers eligible for universal service;⁸⁸ defining the scope of regulatory

⁸² See *AT&T Petition* at 18.

⁸³ See *id.* at 18-19 (quotation marks in original; footnote omitted).

⁸⁴ See 47 U.S.C. §153(55).

⁸⁵ See 47 U.S.C. §153(54).

⁸⁶ See 47 U.S.C. § 251(h)(1).

⁸⁷ See 47 U.S.C. § 153(44).

⁸⁸ See 47 U.S.C. § 214(e)(6).

jurisdiction reserved to the states;⁸⁹ defining CPNI obligations;⁹⁰ and defining carrier obligations for infrastructure sharing.⁹¹ Similarly, “toll service” is also defined in the Act,⁹² and the term is used to define “exchange access.”⁹³

Even if the Commission were to open a proceeding to conduct a trial of IP-enabled technology, AT&T has not demonstrated how the Commission can gloss over the fundamental definitions and requirements of the Act.

2. Compulsory service requirements.

AT&T argues that the Commission should eliminate “compulsory service requirements” for ETCs. AT&T argues for a so-called “rational procurement model” in which acceptance of universal service obligations would be a business option for telecommunications carriers rather than a universal service obligation. Moreover, AT&T argues that this approach is “the only lawful option for the future” under recent Commission precedents.⁹⁴

NRIC respectfully submits that federal and state service obligations codified in sections 214(e) and 254 are the fundamental core of providing universal service.⁹⁵ Section 254 of the Act

⁸⁹ See 47 U.S.C. § 221(b).

⁹⁰ See 47 U.S.C. § 222(e).

⁹¹ See 47 U.S.C. § 259(d)(2).

⁹² See 47 U.S.C. § 153(55).

⁹³ See 47 U.S.C. § 153(16).

⁹⁴ *AT&T Petition* at 17-18.

⁹⁵ NRIC agrees with AT&T that a conversion of a local exchange network from TDM transmission protocol to IP transmission protocol does not amount to a discontinuance of service under section 214(a) of the Act. As AT&T notes, following that conversion, “consumers receive all the essential functionalities as before.” *AT&T Petition* at 13. There should be no need for a

requires the Commission to adopt specific and predictable support mechanisms to “preserve and advance” universal service. Similarly, section 214(e) requires a finding that the carrier offers and advertises prescribed services “throughout the service area” as a condition for designating an ETC.

Granting this aspect of the *AT&T Petition* could sweep aside these statutory requirements. If AT&T’s underlying concern is that universal service funding is insufficient to create incentives for IP-enabled network deployment, NRIC agrees. However, that concern can be addressed separately in the manner addressed by NTCA.

Taken on face value, however, AT&T has failed to demonstrate how the Commission can adopt the new “procurement model” when AT&T appears to couple that model to the elimination of all of the current obligations of today’s ETCs to provide service throughout their existing service areas. AT&T has failed to articulate any sustainable rationale showing how this result would comply with the letter and spirit of 47 U.S.C. §214(e), which allows high-cost support only for designated ETCs. AT&T has also failed to reconcile its proposal for unilateral abandonment of all existing carrier universal service obligations with the underlying public

carrier installing IP transmission equipment to seek prior approval under section 214(a). Since conversion to IP does not produce a service discontinuance, there is no need for the Commission to decide the hypothetical questions of whether, if there were such a discontinuance, section 214(a) would not apply because the new service somehow falls into a new legal category. At the same time, however, the Commission should ensure that any discussion of discontinuance under 47 U.S.C. §214(a) does not trump the specific requirements under Section 214(e) where a telecommunications carrier seeks to discontinue its status as an ETC, particularly where the service seeking to be discontinued under Section 214(a) is the service that is required to be provided by the ETC.

policy that universal service is to be preserved (as well as advanced).⁹⁶ Finally, AT&T has not explained how the Commission could depart from the principles in section 254(b) altogether to achieve some other AT&T-sponsored policy goal.⁹⁷

The FCC cannot abandon the long-accepted statutory structure as AT&T urges due, apparently in AT&T's view, to a change in network transmission technology nor does NRIC believe it would be wise for the FCC to abandon its rules that were developed to protect consumers, promote competition, and advance universal service. Any such abandonment should be rejected by the Commission.

3. Interconnection requirements.

The 1996 revisions to the Act enacted a statutory structure as to generally how competition within the local exchange market would occur. In Section 251, Congress established a series of escalating interconnection requirements that apply to all telecommunications carriers (via Section 251(a)), to local exchange carriers (via Section 251(b)), and to certain incumbent local exchange carriers (via Section 251(c)).⁹⁸

The *AT&T Petition* appears to gloss over the practical effect of these escalating interconnection obligations without addressing the possible impact on other telecommunications carriers of eliminating these obligations. Regarding the proposed trial, for example, this gloss is

⁹⁶ See 47 U.S.C. §§254(b)(5) and 254(d).

⁹⁷ See *Qwest Corp. v. FCC*, 258 F.3d 1191, 1200 (10th Cir.2001).

⁹⁸ And, the Section 251 structure also provided either relief to a certain class of carrier – defined as RTCs (see 47 U.S.C. §153(44)) from certain interconnection requirements until the “exemption” from them was removed (see 47 U.S.C. § 251(f)(1)) or the opportunity for a carrier to seek relief should that carrier be qualified to do so. See 47 U.S.C. §251(f)(2).

demonstrated when AT&T asks the Commission to “keep IP services free of legacy regulation.”⁹⁹ More fundamentally, in characterizing all services provided over IP networks as “information services,”¹⁰⁰ AT&T seems to be arguing for a wholesale repeal of all the interconnection requirements established in or under the Act.

If, as AT&T maintains, voice services offered by IP networks are information services, then the consequences of that conclusion would be to undermine the interconnection requirements under Section 251. If AT&T’s contention is adopted and all services are no longer telecommunications services, there may be no basis to apply Section 251(a) because the provider of the network would not be a telecommunications carrier; there may be no basis to apply Section 251(b) because no provider would be a local exchange carrier; and there may be no basis to apply Section 251(c) because no provider would be considered an ILEC. AT&T has failed to reconcile these consequences arising from the framework it seeks with the public interest.

Adoption of AT&T’s framework could have secondary effects on state regulation as well, a consequence which AT&T does not address in any detailed manner. Abating federal interconnection requirements would create enormous uncertainty about the continuing validity of state interconnection laws, regulations, and orders. States would also likely have to litigate a variety of judicial and administrative claims that the FCC actions have preemptive effect. Such controversies are not in the public interest and AT&T’s failure to address these possibilities critically undermines the *AT&T Petition*.

⁹⁹ *AT&T Petition* at 22.

¹⁰⁰ *Id.* at 18.

As the *NTCA Petition* noted, carrier-to-carrier interconnection issues are of critical interest to both ILECs and competitive carriers.¹⁰¹ As NTCA also properly notes, recent experience raises significant issues with the exercise of market power by large carriers such as in dictating prices in supposedly balanced negotiations as well as by reducing service quality.¹⁰² Special access pricing is a particular concern because the Commission has taken thirteen-plus years to determine whether regulatory oversight of pricing is appropriate, thus placing “consumers, competition itself, and universal service all at risk.”¹⁰³

Applying the Section 251 framework coupled with federal and state common carrier requirements may not be the ideal means to redress market power imbalances. However, without these statutory frameworks in place, smaller carriers would have no practical or economically viable remedy save court actions against much larger national carriers. The time and expense of litigating to obtain just and reasonable interconnection terms and prices would be prohibitive.

Accordingly, the Commission should not minimize the importance of its interconnection rules as networks evolve to IP-based transmission protocols. A technology change from TDM-to-IP in transmission technology is not a sufficient basis for overruling the interconnection structure under the Act as well as under state law.

¹⁰¹ See *NTCA Petition* at 7.

¹⁰² NTCA noted, for example, that a dispute might arise between interconnected networks in which connections are slowed, misrouted, degraded, or even shut off altogether. See *id.* at 7.

¹⁰³ *Id.* at 8, n. 14.

4. Other regulations.

AT&T also takes aim at “conventional public-utility-style regulation,” arguing this regulation is “no longer necessary or appropriate in the emerging all-IP ecosystem.”¹⁰⁴ AT&T specifically claims that price regulation, apparently in both state and federal jurisdictions, “both undermines investment incentives (by limiting cost-recovery in potentially unforeseeable ways) and distorts competition with unregulated rivals”.¹⁰⁵ AT&T also aims to avoid all “service-performance obligations” such as a requirement that ETCs provide “standalone voice service.”¹⁰⁶

NRIC respectfully submits that the Commission should reject both AT&T’s sweeping generalizations and the relief AT&T seeks. Certainly some classic circuit-switched features, such as rotary pulse dialing,¹⁰⁷ have become obsolete. Indeed, although modern telephones on the market today often provide both tone and pulse dialing, tone dialing is usually set as the default mode. It turns out that modern electronic circuits simply make it faster and less costly to signal a telephone number using tones than pulses.

Contrary to AT&T’s suggestion, however, this shift has not occurred because IP protocol has offered new and more efficient opportunities for transport and switching or because many people today use the Internet or because a new century has arrived.¹⁰⁸ Tone dialing would be faster and more efficient even if the Internet did not exist.

¹⁰⁴ *AT&T Petition* at 6.

¹⁰⁵ *Id.* at 16.

¹⁰⁶ *Id.* at 16-17.

¹⁰⁷ *See id.* at 16, n. 25.

¹⁰⁸ *See id.* at 11, 16.

But technological evolution is not a valid premise for running the risk of allowing large carriers to use market power in anticompetitive ways. Whether the PSTN primarily uses IP technology, TDM technology, or human operators at switchboards is largely irrelevant to the need for properly targeted regulation (such as that suggested by the *NTCA Petition*). Even with IP technology, large carriers can still have sufficient market power to impose price squeezes on smaller carriers, to impair competitors through their management of interconnections and service quality, and to impose on retail customers both high prices and mediocre service quality. All these public policy arguments for the need for regulation remain valid today, even with an IP-enabled PSTN.¹⁰⁹

5. Preemption.

AT&T urges that the Commission should sweep aside provisions in the Act that preserve state authority and should preempt essentially all regulation of the telecommunications industry, as soon as AT&T (or some other telecommunications carrier) begins to provide “IP-enabled services.” In context, it would also appear that AT&T uses the term “services” to cover the network and facilities used to provide those services. Thus, the AT&T framework seems to be encouraging the Commission to preempt all state regulation regarding investment in IP equipment, the quality and maintenance of IP equipment, and the pricing of equipment used in

¹⁰⁹ See also *NTCA Petition* at 9, n. 15 (and accompanying text).

providing IP-enabled services.¹¹⁰ If this is AT&T's intent, then it has failed to demonstrate either the facts and/or lawfulness of the preemption of states sought through these contentions.

AT&T asserts an extraordinary and unsupported theory of regulatory power. Preemption of state law is "not lightly to be presumed"¹¹¹ and is not lightly found.¹¹² Further, with respect to the 1996 revisions to the Act, exceptions to existing state authority must be express.¹¹³

In addition, the law limits federal agencies to the exercise of delegated powers. Federal agencies are not permitted to preempt a state regulation merely because it violates the agency's self-determined "agenda."¹¹⁴ Administrative agencies also may act only pursuant to authority delegated to them by Congress.¹¹⁵ Congressional policy, expressed in a statute, is not a sufficient

¹¹⁰ *AT&T Petition* at 18. Specifically, for example, AT&T maintains that "in many states, legacy service obligations effectively preclude retirement of the TDM-based network." *See id.* at 16. AT&T implies that these state-imposed regulations should be swept away by the Commission. Even more broadly, AT&T argues that the Commission has "clear authority to preempt *any* state regulatory obligations that would . . . subvert the most important objective on the Commission's agenda." *Id.* at 23 (emphasis added).

¹¹¹ *See, e.g., Greater Washington Bd. of Trade v. District of Columbia*, 948 F.2d 1317, 1320 (D.C. Cir. 1991); *N.L.R.B. v. Pueblo of San Juan*, 276 F.3d 1186, 1195 (10th Cir. 2002) *citing Maryland v. Louisiana*, 451 U.S. 725, 746 (1981) ("Statutes are entitled to the presumption of non-preemption."); *Missouri Bd. of Examiners for Hearing Instrument Specialists v. Hearing Help Exp., Inc.*, 447 F.3d 1033, 1035 (8th Cir. 2006) *citing Cipollone v. Liggett Group, Inc.*, 505 U.S. 504, 518-19 (1992). *Compare, Louisiana PSC v. FCC*, 476 U.S. 355 (1986).

¹¹² *See Wisconsin Public Intervenor v. Mortier*, 501 U.S. 597 (1991); *see also Ramsey Winch Inc. v. Henry*, 555 F.3d 1199, 1204 (10th Cir. 2009) quoting *Nat'l Solid Wastes Mgmt. Ass'n v. Killian*, 918 F.2d 671, 676 (7th Cir. 1990) ("Courts do not 'lightly attribute to Congress or to a federal agency the intent to preempt state or local laws.'").

¹¹³ Telecommunications Act of 1996, Section 601(c)(1), codified at 47 U.S.C. §153 note.

¹¹⁴ *AT&T Petition* at 23.

¹¹⁵ *Comcast Corp. v. FCC*, 600 F.3d 642, 654 (DC Cir. 2010).

basis for agency action,¹¹⁶ to say nothing of an agency's self-created "agenda" that may not have received a statutory statement of policy from the Congress. The FCC can act only after mooring its action to a distinct grant of authority in the Act.¹¹⁷

Disregarding these judicial limitations on the authority of the Commission, AT&T presents a theory that would provide the basis for removing virtually all state and federal regulation on telecommunications carriers (as well as on other providers of transmission services). Even if one could overcome the legal objections, no such overthrow of fundamental legal and regulatory theory is warranted by the facts. IP is a form of transmission management that is not fundamentally different, from an engineering point of view, from earlier packet-based technologies that have been in place for years. For the reasons explained above, it is legal error to assert that this technology shift fundamentally alters the legal status of the network.

AT&T also asserts that "twentieth century regulatory obligations need to be eliminated to allow a transition to twenty-first century networks and services."¹¹⁸ This assertion conflicts with history and otherwise invites action that would likely increase tensions with the states.

For centuries, common carriage principles have structured the transportation and communications industries. Borrowing from English common law traditions that imposed certain duties on individuals engaged in "common callings," such as innkeepers, ferrymen, and carriage drivers, American common law has long applied the concept of common carriage to

¹¹⁶ *Id.*

¹¹⁷ *Cellco Partnership v. FCC*, 700 F.3d 534, 542 (DC Cir. Dec. 4, 2012); *Motion Picture Association of America, Inc. v. FCC*, 309 F.3d 796, 806 (D.C. Cir. 2002).

¹¹⁸ *AT&T Petition* at 11.

transportation and communications enterprises. Under the common law, all comers had “equal rights” of access to a common carrier’s enterprise, “both in respect to service and charges.”¹¹⁹ These common law principles themselves had earlier antecedents dating back to medieval times.¹²⁰ In light of the deep historical roots of the public’s need for access to essential service, AT&T has not demonstrated that this need evaporated once the new millennium began, once packet networks became more efficient than TDM networks, or once a carrier deploys IP-based technology within its network.

AT&T’s approach also invites unnecessary conflict between the states and the federal government. There may indeed be some state or federal regulatory requirements in place that could be proven to be barriers to the deployment of modern networks. If a state regulation does indeed impose an obsolete technical requirement that is a barrier to installation of more modern technology, AT&T can ask the state to withdraw that regulation based on a fact-driven demonstration as to why such regulation is adversely affecting the deployment of IP-based technology within AT&T’s network. Rather than seek here to target any specific action in a state that conflicts with federal policy, AT&T apparently seeks global preemption of the entire field.

¹¹⁹ *Cellco Partnership v. FCC*, 700 F.3d at 545 citing *Western Union Telegraph Co. v. Call Publishing Co.*, 181 U.S. 92, 100 (1901) (discussing *Interstate Commerce Commission v. Baltimore & O.R. Co.*, 145 U.S. 263, 275 (1892) (explaining that even prior to the passage of the Interstate Commerce Act, railroads were bound by the common law duties of common carriers) and *Western Union Telegraph Co. v. Call Publishing Co.*, 181 U.S. 92, 98, 102 (1901) (telegraph company subject to common law common carriage duties).).

¹²⁰ See Barbara A. Cherry, Utilizing “Essentiality of Access” Analyses to Mitigate Risky, Costly and Untimely Government Interventions in Converging Telecommunications Technologies and Markets, 11 *CommLaw Conspectus* 251, 257 (2003).

To have the Commission eviscerate state commission roles that are respected under the Act would create needless conflicts at a time when both the Commission and state commissions should be acting together to continue the migration to IP-based networks.¹²¹

Regardless, AT&T has failed to demonstrate that, as a matter of law, the *possibility* of a conflicting regulation justifies the preemption that the *AT&T Petition* seeks. History provides little basis to assume that the states would deny petitions for relief from regulations that stand in the way of progress. It is inappropriate to simply assume that states are likely to deny such petitions. If a conflict does occur between an AT&T request to a state and federal policy, AT&T can then file at the Commission a fact-specific preemption petition that explains why a state is preventing AT&T from moving forward with modern technology. Until that day, however, NRIC respectfully submits that the overly broad preemption that AT&T seeks should be rejected for all of the reasons stated above.

6. Effects on rural areas.

NRIC is also concerned that AT&T has glossed over the adverse real-world effects that the accumulation of the legal changes outlined in the *AT&T Petition* would have in both the short and long term. For the following eight reasons, NRIC respectfully submits that the *AT&T*

¹²¹ Contrary to AT&T's approach, NRIC notes that the FCC's recently announced "Technology Transitions Policy Task Force" (*see* News Release, FCC Chairman Julius Genachowski Announces Formation of 'Technology Transitions Policy Task Force' (December 10, 2012)) indicated that the "Task Force will conduct a data-driven review and provide recommendations to modernize the Commission's policies in a process that encourages the technological transition, empowers and protects consumers, promotes competition, and ensures network resiliency and reliability" (*id.* at 1) and, moreover, it appears that this Task Force will also "coordinate with the NARUC Presidential Task Force on Federalism and Telecommunications. . . ." *Id.*

Petition has not properly explained or demonstrated the adverse impacts on universal service, on the carriers that serve the nation's rural markets and, most importantly, on customers in rural America.

First, AT&T has failed to reconcile its position with the fact that its framework, effectively, provides neither meaningful regulatory oversight of interconnection nor any requirement to interconnect at all, in either IP or TDM networks. All interconnection would occur solely at the discretion of the carrier via "commercial agreements" and would eliminate access to state commissions for regulatory relief, leaving only the expense and burden presented by court actions against national carriers. In addition, without regulatory oversight, commercial agreements could, from a practical perspective, effectively, force small carriers to consider a "take it or leave it" interconnection terms dictated by those large national carriers.

Second, under AT&T's proposed framework, rural carriers may be forced to interconnect with large carriers' IP networks at distant network access points dictated by those carriers. One choice for the small carrier would be to pay the costs of reaching those destinations, thereby increasing their interconnection costs beyond the level envisioned by statute.¹²² Another choice for small carriers would be to forego long-distance calling capabilities, thereby eliminating the universality of the network.

Third, under AT&T's "procurement model," federal universal service funding (which already is severely inadequate) could greatly decline for small carriers serving customers in the

¹²² 47 U.S.C. 251(c)(2) contains the most onerous of interconnection obligations under the Act. Even under that section, the point of interconnection must be within the network of the smaller ILEC. *See* 47 U.S.C. §251(c)(2)(B).

highest-cost areas. This would likely lead to accelerated disinvestment, and could lead to service abandonment and bankruptcies.

Fourth, under AT&T's jurisdictional theory, state universal service funds will ultimately cease to exist, as states will find that, as IP-enabled networks predominate, a state's contribution base of "intrastate" revenues shrinks, eventually to nothing. As rates rise, existing state programs will become politically untenable.

Fifth, under AT&T's framework, customers will no longer be able to make long-distance calls over the interexchange carrier of their choice. Long-distance service is still widely utilized, especially in rural areas. Customers could be forced to use other services (IP or wireless) even if that is not their preference and even if those services are inferior. Moreover, with no obligations to terminate traffic to carriers that are still using TDM technology, rural call termination issues may simply be exacerbated.

Sixth, if the AT&T framework was imposed, AT&T and other dominant carriers will cease paying all intercarrier compensation, a result that goes beyond even the changes mandated by the *FCC Transformation Order*. However, intercarrier compensation payments that carriers such as the NRIC members make to dominant carriers for transit and special access services will continue unabated.

Seventh, in light of the preemption AT&T seeks, state regulatory commissions will have no authority over any aspect of regulation, despite the language and framework within the Act.

Finally, should AT&T's framework be implemented, many customers in rural America could ultimately lose voice and broadband service altogether as smaller rural carriers, finding their interconnection costs increased, are no longer required to meet COLR requirements as they will not have sufficient revenues and cash flow to maintain service.

NRIC respectfully suggests that these consequences of adopting the *AT&T Petition* framework would harm rural customers and rural carriers. AT&T has not demonstrated why these potential consequences are in the public interest. While AT&T claims that establishment of the framework within the *AT&T Petition* will lead to increased investment, ultimately the question for public policy makers is “at what costs.” Should customers have their retail prices increased and face an increased risk that service will be lost? Should regulatory oversight be abandoned? Should additional costs be imposed on smaller carriers for interconnection? And, should state commissions be held powerless to do anything? As one of those policy making bodies, the Commission cannot and must not allow these questions to be answered in the affirmative. The *AT&T Petition* should be denied.

IV. CONCLUSION.

NRIC recommends that the FCC to create incentives for carriers to continue and accelerate investments in IP-enabled technology within the PSTN with a balanced regulatory approach. For the reasons stated herein, NRIC agrees with NTCA’s proposal that the FCC should confirm that “all interconnection for the exchange of traffic subject to sections 251 and 252 is governed by the Act, regardless of the technology that might happen to be used to achieve such interconnection”¹²³ as amplified by NRIC above to ensure that all consumers nationwide continue to have access to quality communications services and to use the fact-based framework that NTCA proposes to evaluate other rules and obligations. That process calls for

¹²³ *NTCA Petition* at 14 (emphasis in original).

identifying federal regulations, based on the facts, that inhibit the on-going migration from TDM-based networks to IP-based networks, and then determining whether the public interest is served by either retaining, modifying or eliminating those regulations. Based on these federal findings, state commissions can then determine the actions that are necessary based on their regulatory jurisdiction and state-established regulatory policies and requirements.

In all events, however, the continued migration to an IP-based set of networks should not, as AT&T proposes, undermine important protections in the Act's regulatory structures. The arrival and installation of IP as a transmission protocol should not become an excuse to disregard essential structures within the Act or to be used as a preemptive attack on state commission jurisdiction.

Therefore, the Commission should reject the broad scope implied in the *AT&T Petition* and act consistent with the more modest suggestions in the *NTCA Petition*. NTCA is correct in stating that this on-going migration/evolution to IP-based networks must "hearken back ultimately to the core objectives of protecting consumers, promoting competition, and ensuring universal service."¹²⁴ This must and should be the foundation for action taken by the Commission and is a test that the *AT&T Petition's* framework cannot meet.

Accordingly, NRIC respectfully requests that the FCC address the continued and ongoing transition of the TDM-based networks to IP-based networks, identifying those specific rules that have factually been demonstrated to adversely affect this natural evolution, and to propose constructive and legally sustainable changes to such identified rules for public comment and

¹²⁴ *Id.* at 15.

reaction. This is the same framework offered by NTCA which should be adopted. Moreover, by adopting the NTCA-proposed framework, the FCC can otherwise avoid the adverse public interest consequences arising from the adoption of the *AT&T Petition* and the regulatory/market structure that AT&T seeks.

Dated: January 28, 2013.

Respectfully submitted,

Arlington Telephone Company, The Blair Telephone Company, Cambridge Telephone Company, Clarks Telecommunications Co., Consolidated Telephone Company, Consolidated Telco, Inc., Consolidated Telecom, Inc., The Curtis Telephone Company, Eastern Nebraska Telephone Company, Great Plains Communications, Inc., Hamilton Telephone Company, Hartington Telecommunications Co., Inc., Hershey Cooperative Telephone Co., K. & M. Telephone Company, Inc., The Nebraska Central Telephone Company, Northeast Nebraska Telephone Company, Rock County Telephone Company, Stanton Telecom, Inc., and Three River Telco

The Nebraska Rural Independent Companies

By:



Thomas J. Moorman
tmoorman@woodsaitken.com
Woods & Aitken LLP
2154 Wisconsin Ave. NW, Suite 200
Washington, D.C. 20007
(202) 944-9502

Paul M. Schudel, No. 13723
pschudel@woodsaitken.com
James A. Overcash, No. 18627
jovercash@woodsaitken.com
WOODS & AITKEN LLP
301 South 13th Street, Suite 500
Lincoln, Nebraska 68508
(402) 437-8500

Their Attorneys